



Rural Electric Cooperative Corporation

A Touchstone Energy Cooperative X



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PUBLIC SERVICE

COMMISSION

MEMORANDUM

Date:

May 9, 2003

To:

Thomas Dorman

PSC

From:

Vince Heuser

Vice President System Operations

Subject: Feb 16, 2003 – Ice Storm Restoration Assessment

The following information is in response to your request for Storm Restoration Assessment.

1. Initial evaluation/assessment of Damage

The ice storm of February 15-16 caused minor damage to the Nolin RECC Service Area. Nolin received the first outage calls on February 16th at 3:20 A.M. Calls were received on a continual basis for the next 45 hours. The duration of most outages averaged 2-3 hours. Damage was caused by trees falling across power lines and heavy ice collection on power lines. The initial damage was cleared by midnight, February 17th.

A second round of outages occurred on February 18th when ice began melting off lines and causing conductors to flop together. This resulted in short duration outages (1-2 hours). All power was restored by midnight on February 19th.

2. Prioritization of repairs

Nolin prioritizes by transmission, substation, distribution, feeders, taps & individual consumers. Priority is given to medical alerts and public safety. A chart describing outage restoration is published annually in our magazine. (See Schedule C)

- 3. A timeline, scaled at increments no greater than 24 hours, of the number of employees and heavy equipment participating in the restoration. Employees should be categorized by classification and employer (See schedule A)
- 4. A timeline showing the number of customers without service at increments no greater than 12 hours (See schedule B)
- 5. Availability and effectiveness of contract crews and/or mutual aid crews

Four Local Contract Crews were utilized. Mutual Aid Crews were not needed due to the short duration of the emergency. Contract crews that were familiar with the Nolin system were utilized and extremely effective.

6. Operational Coordination between your utility and contractors, volunteers and governmental agencies

Operational Coordination took place through our Dispatch Center Supervisor. Both Utility and Contract crews are equipped with 2-way radios and Nextel direct connect phones. Volunteer help was not used. Government agencies utilize a private (unlisted) phone line in the dispatch center. The private phone line allows for emergency access.

7. Availability of Materials & Supplies

Materials and supplies were available in abundance from regular inventory supplies.

8. Tree Trimming practices and history (clear-cut, trim, time between cycles, etc.)

Clearing is maintained on a four-year cycle. Thirty-foot wide right-of-ways are utilized when practical.

9. Consumer hours out and utility expenditures per consumer hour out

Consumer hours out totaled 12,501. Total expenditures per hour averaged \$11.12.

10. Call center operations (IVR, contract call center, daily average response time per call, etc.)

Nolin does not utilize a call center. Nolin does man a 24-hour dispatch center with trained system operators to handle calls and dispatch crews. Overflow calls are routed to an automated attendant that can gather information electronically.

11. Outage tracking/response software used; to what extent

Nolin utilizes software that identifies location, time received, time off, time power restored, substation, feeder and line section.

12. Communications with customers, media, public officials, governmental agencies, PSC

Local media was informed several times daily with progress reports. Storm damage was not severe enough to solicit local emergency Management or Government officials. Local Emergency Services are communicated with through special telephone line.

13. Coordination of efforts with the Division of Emergency Management and other local emergency management officials

Coordination with local Division of Emergency Management was not needed with this storm.

14. Plans for post restoration cleanup and outside facility inspections

Right-of-Way clearing crews did minor tree removal clean up after power was restored. All affected facilities are inspected prior to restoring service. All work is completed.

15. What service/support could the PSC offer that would be of assistance

Promote consumer education of safety related issues during storm emergencies.

16. Other Factors

Nolin continually looks for new ways to improve service reliability. This ice storm did not cause any unanticipated problems. Supervisory personnel tracked weather conditions throughout the weekend and had alerted both Nolin and Contract Personnel to be ready to respond as needed. Crews responded immediately when the first outage call was received.

Schedule A

NOLIN RECC EMPLOYEES & EQUIPMENT

2/16/03	
SUPERVISERS	
ENGINEERS	4
ENGINEERING TECH	4
LINE TECHNICIANS	29
LINE & BUCKET TRUCKS	16
SERVICE VEHICLES	12
	12
2/17/03	
SUPERVISERS	4
ENGINEERS	1
ENGINEERING TECH	4
LINE TECHNICIANS	29
LINE & BUCKET TRUCKS	16
SERVICE VEHICLES	12
2/18/03	
SUPERVISERS	4
SUPERVISERS ENGINEERS	4 1
SUPERVISERS ENGINEERS ENGINEERING TECH	1
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS	1
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS	1 4 29 16
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS	1 4 29
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES	1 4 29 16
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES	1 4 29 16 12
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES 2/19/03 SUPERVISERS	1 4 29 16 12
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES 2/19/03 SUPERVISERS ENGINEERS	1 4 29 16 12
SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES 2/19/03 SUPERVISERS ENGINEERS ENGINEERING TECH	1 4 29 16 12 4 1
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SUPERVISERS ENGINEERS ENGINEERING TECH LINE TECHNICIANS LINE & BUCKET TRUCKS SERVICE VEHICLES 2/19/03 SUPERVISERS ENGINEERS ENGINEERING TECH	1 4 29 16 12 4 1

CONTRACTOR EMPLOYEES & EQUIPMENT

2/16/03	
SUPERVISERS	1
LINE TECHNICIANS	5
LINE & BUCKET TRUCKS	3
2A7/03	
SUPERVISERS	1
LINE TECHNICIANS	5
LINE & BUCKET TRUCKS	2
0/40/00	
2/18/03	
SUPERVISERS	1
LINE TECHNICIANS	4
LINE & BUCKET TRUCKS	2

Schedule B

OUTAGE TIMELINE

GOTAGE TIMELINE		
2/16/03 3:20 A.M 6:30 A.M.		
PRIMARY LINES DOWN: CONSUMERS OFF:	3 190	
6:30 A.M 10:30 A.M.		
PRIMARY LINES DOWN: STILL OFF:	1 11	
10:30 A.M 2:00 P.M.]	
PRIMARY LINES DOWN: CONSUMERS OFF: STILL OFF:	7 266 32	
2:00 P.M 4:00 P.M.]	
PRIMARY LINES DOWN: CONSUMERS OFF: BROKEN POLES: STILL OFF:	4 129 1 105	
4:00 P.M 7:00 P.M.	i I	
PRIMARY LINES DOWN: CONSUMERS OFF: STILL OFF:	3 1505 1205	
2/17/03 7:00 P.M 12:00 A.M.		
PRIMARY LINES DOWN: CONSUMERS OFF: BROKEN POLES: STILL OFF:	5 1658 0 50	
2:00 A.M 10:00 A.M.		
PRIMARY LINES DOWN: CONSUMERS OFF: BROKEN POLES: STILL OFF:	0 14 0 13	
10:A.M 12:00 A.M.		
PRIMARY LINES DOWN: CONSUMERS OFF: BROKEN POLES: STILL OFF:	0 43 0 0	

INITIAL DAMAGE CLEARED

2/18/03 12:00 A.M. - 12:00 P.M.

(Ice Melting)

PRIMARY LINES DOWN: 0
CONSUMERS OFF: 206
STILL OFF: 8

12:00 P.M. - 12:00 A.M.

PRIMARY LINES DOWN: 2
CONSUMERS OFF: 69
STILL OFF: 15

2/19/03 12:00 A.M. - 12:00 P.M.

PRIMARY LINES DOWN: 4 CONSUMERS OFF: 201

SERVICE:

BROKEN POLES: POWER RESTORED:

STILL OFF: 93

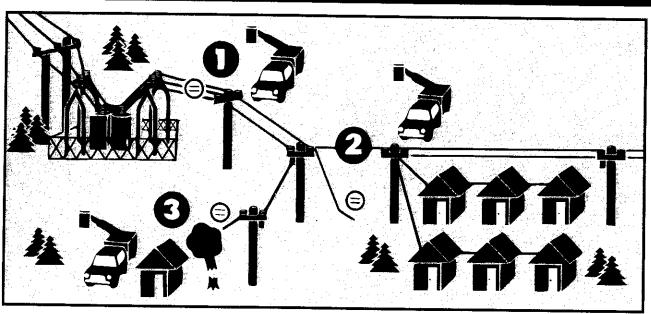
12:00 P.M. - 12:00 A.M.

PRIMARY LINES DOWN: 3
CONSUMERS OFF: 279
STILL OFF: 0

2/20/03

NO NEW LINES DOWN - VERY SMALL NUMBER OF OUTAGES WITH SHORT DURATION.

Getting You Back On Line



In any electrical outage, the first priority is to get the greatest number of people back on line as quickly as possible. That's why electric co-ops follow a sequence of repairs that restores

power to large groups of consumers before tackling smaller groups and individual consumers. This fictitious example details a typical repair sequence.

- The main distribution line from the substation must be repaired before anyone can have power.
- Next, crews repair the lines that bring power to the greatest number of customers in a community.
- 3 After larger pockets of customers have power, crews repair service lines to individual homes.

Next time you turn up the heat, remember those who can't.



Not everyone has the luxury of a warm house on a cold night. In fact, thousands of elderly, disabled, or low-income Kentuckians can't afford to adequately heat their homes.

You can do something about it. When you pay your electricity bill, add \$1 or more for the WinterCare Energy Fund.

A space is provided on your bill to indicate the amount you wish to contribute. Then simply add the extra one dollar or two when writing your check. All local contributions are used to assist the needy within Nolin's service area.

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